



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office

NOTICE OF ALLOWANCE AND ISSUE FEE DUE

IM22/0919

ROCKY, MILNAMOW & KATZ  
TWO PRUDENTIAL PLAZA  
180 NORTH STETSON AVENUE  
SUITE 4700  
CHICAGO IL 60601

APPLICATION NO.	FILING DATE	TOTAL CLAIMS	EXAMINER AND GROUP ART UNIT	DATE MAILED
09/045,245	03/20/98	064	NICOLAS, W	1741 09/19/00
First Named Applicant	CHEN, 35 USC 154(b) term ext. = 0 Days.			

TITLE OF INVENTION APPARATUS AND METHOD FOR ELECTROLYTICALLY DEPOSITING A METAL ON A MICROELECTRONIC WORKPIECE

ATTY'S DOCKET NO.	CLASS-SUBCLASS	BATCH NO.	APPLN. TYPE	SMALL ENTITY	FEE DUE	DATE DUE
1 SMT4492P0020	205-123.000	S37	UTILITY	NO	\$1210.00	12/19/00

**THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED.**

**THE ISSUE FEE MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED.**

**HOW TO RESPOND TO THIS NOTICE:**

**I. Review the SMALL ENTITY status shown above.**

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is changed, pay twice the amount of the FEE DUE shown above and notify the Patent and Trademark Office of the change in status, or
- B. If the status is the same, pay the FEE DUE shown above.

If the SMALL ENTITY is shown as NO:

- A. Pay FEE DUE shown above, or
- B. File verified statement of Small Entity Status before, or with, payment of 1/2 the FEE DUE shown above.

**II. Part B-Issue Fee Transmittal should be completed and returned to the Patent and Trademark Office (PTO) with your ISSUE FEE. Even if the ISSUE FEE has already been paid by charge to deposit account, Part B Issue Fee Transmittal should be completed and returned. If you are charging the ISSUE FEE to your deposit account, section "4b" of Part B-Issue Fee Transmittal should be completed and an extra copy of the form should be submitted.**

**III. All communications regarding this application must give application number and batch number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.**

**IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.**

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T-D

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/045,245	03/20/98	CHEN	L SMT4492P0020

IM22/0919

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EXAMINER

NICOLAS, W

ART UNIT

PAPER NUMBER

1741

DATE MAILED:

09/19/00

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Notice of Allowability

Application No.

09/045,245

Applicant(s)

Chen

Examiner

Wesley Nicolas

Group Art Unit

1741



All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance and Issue Fee Due or other appropriate communication will be mailed in due course.

☒ This communication is responsive to After Final Amendment

☒ The allowed claim(s) is/are 1-46, 49-65, and 69

☐ The drawings filed on \_\_\_\_\_ are acceptable.

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

A SHORTENED STATUTORY PERIOD FOR RESPONSE to comply with the requirements noted below is set to EXPIRE **THREE MONTHS** FROM THE "DATE MAILED" of this Office action. Failure to timely comply will result in ABANDONMENT of this application. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

☐ Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL APPLICATION, PTO-152, which discloses that the oath or declaration is deficient. A SUBSTITUTE OATH OR DECLARATION IS REQUIRED.

☒ Applicant MUST submit NEW FORMAL DRAWINGS

☐ because the originally filed drawings were declared by applicant to be informal.

☒ including changes required by the Notice of Draftsperson's Patent Drawing Review, PTO-948, attached hereto or to Paper No. \_\_\_\_\_

☒ including changes required by the proposed drawing correction filed on 1-13-00, which has been approved by the examiner.

☐ including changes required by the attached Examiner's Amendment/Comment.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the reverse side of the drawings. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

☐ Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Any response to this letter should include, in the upper right hand corner, the APPLICATION NUMBER (SERIES CODE/SERIAL NUMBER). If applicant has received a Notice of Allowance and Issue Fee Due, the ISSUE BATCH NUMBER and DATE of the NOTICE OF ALLOWANCE should also be included.

## Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

☒ Interview Summary, PTO-413

☒ Examiner's Amendment/Comment

☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

☒ Examiner's Statement of Reasons for Allowance

*[Handwritten signature]*

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### **DETAILED ACTION**

This is in response to the After Final Amendment dated September 11, 2000. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-46, 49-65, and 69-71 are currently pending in this application.

#### **Claim Rejections - 35 USC § 112**

1. The 35 U.S.C. § 112, first paragraph rejections as set forth in the previous Office action have been **withdrawn** in view of the argument made by Applicant in paper # 8 and also by the argument by Applicant in the personal interview conducted on 8/29/00.

#### **Claim Rejections - 35 USC § 102/103**

2. The 35 U.S.C. § 102 and 103 rejections as set forth in the previous Office action have been **withdrawn** in view of the argument made by Applicant in paper # 8.

#### **Examiner's Amendment**

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312.

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To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Robert Polit on September 18, 2000.

4. The application has been amended as follows:

**In the claims:**

Claims ~~70~~ and 71 have been canceled without prejudice or disclaimer.

**Allowable Subject Matter**

5. The following is an examiner's statement of reasons for allowance:

The specific method and apparatus for repairing a seed layer was not taught or suggested by the prior art of record. With respect to the apparatus claims, Applicant has provided functional language (i.e. "means for") to define the claims over the prior art of record. Furthermore, in certain claims Applicant has positively claimed that the seed layer is **not** suitable for electrochemical deposition or after repairing the seed layer, it is suitable for subsequent electrochemical deposition. Furthermore, Applicant has provided a reasons for allowance in the argument sections of Paper # 8 and it is deemed sufficient by the Examiner and is incorporated herein.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

**REMARKS - Response to Arguments**

6. With respect to the canceled claims, Applicant has agreed to cancel the claims without prejudice or disclaimer as being newly added claims, added After-Final, which are much broader in scope than the apparatus claims currently in the file.

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*Conclusion*

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wesley Nicolas whose telephone number is (703)305-0082. The examiner can normally be reached on Mon.-Thurs. from 7am to 5pm.

The Supervisory Primary Examiner for this Art Unit is Kathryn Gorgos whose telephone number is (703) 308-3328.

The fax number for this Group is (703)305-7719.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703)308-0661.

  
Kathryn Gorgos  
Supervisory Patent Examiner  
Technology Center 1741

Wesley Nicolas

September 18, 2000